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THE GENUS "*AMBLYPODIA*" *AUCTORUM* (DE NICEVILLE, MOORE, SWINHOE, ETC.), *NEC* HORSFIELD (LEP. RHOP.).

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THE generic name *Amblypodia* was proposed by Horsfield ('Cat. Lep.,' E.I.C., p. 98, 1829) for a large number of species of Lycænidae, divided into five sections. viz.: (1) *Narada*; (2) *vivarna*; (3) *apidanus*, *centaurus*, *helus*, *eumolphus*; (4) *phocides*; (5) *vulcanus*, *lohita*, *syama* and some others. On p. 111 of the same work he states that he considers the species of the third section to be typical of the genus. The type of the genus must therefore be one of the species included in the third section, and Boisduval's action in 1870, specifying *narada* as the type, cannot be accepted. The type was finally fixed by Scudder in 1875, who specified *apidanus* as the type. His action was perfectly correct, and must be upheld. *Amblypodia* must therefore supersede *Arhopala* as at present used, and I propose the name *Horsfieldia*, n.n., to replace the *Amblypodia* of modern authors, with *narada*, Horsf., as the type of the genus.

Since the appearance of Bethune-Baker's excellent 'Monograph of the *Amblypodia* Group' little has been done with this rather obscure genus. The life-history of one of the species (*H. anita*, Hew.) has been admirably described by T. R. Bell in the 'Journal of the Bombay Nat. Hist. Soc.,' xxvi, p. 444, and that of the other (*H. narada*, Horsf.) less fully by Snellen in 'Rhop. Java, Lycænidae,' p. 63, 1918; and the various races of the species hopelessly confused by Frühstorfer in a paper in the 'Ent. Zeits.' (Stuttgart), xxi, p. 150, 1907.

As the latter paper is very misleading and also very little known, the following summary of the species and their named forms would appear to be necessary.

The genus, so far as is known, is composed of three species, separated as follows:

Males.

- A. Upper side fore wing, purple with a narrow even black border *anita*.
- B. Upper side fore wing, brilliant blue.
 - a. Black border narrow on costa and posterior portion of hind margin, broad at apex *narada*.

- b. Black border very broad, occupying more than half the wing surface.
- a'. Lower teeth at extremity of clasper strong, well separated, the ventral edge of clasper concave centrally *narada*.
- b'. Same teeth small, close together, ventral edge of clasper nowhere concave *annetta*.

Females.

- A. With blue (or purple) markings on fore wing only, or none at all *anita*.
- B. With blue (or purple) markings on both wings.
- a. The outer edge of blue on fore wing conforming to the contour of the hind margin, or, if not, then only of small extent *anita*.
- b. Outer edge converging markedly with hind margin towards inner angle; if only of small extent then very much longer posteriorly than anteriorly *narada*.
- c. The blue of approximately the same extent on both wings, barely extending more than half-way from base to hind margin *annetta*.

The males in this genus fall very readily into three well-defined groups, according to their genitalia. Individual variation of these parts, however, is considerable, and seasonal variation seems also to occur; in a typical "wet" male from Ceylon the teeth at the extremity of the claspers are not nearly so strongly developed as are those of a "dry" male, with red underside, from the same locality. The claspers in all three species are only strongly chitinised outwardly, ventrally and towards the base for a short distance from the extremity, the bulk of the inner and dorsal surfaces being only membranous. In all three the distal edge is characterised by having two large teeth, one above the other, and a series of smaller ones above these. *Anita* and *annetta* are very similar as to the arrangement of these teeth, but *annetta* has the lower two the more delicate, shorter in relation to the length of the whole clasper, and with the lowest arising sooner than in *anita*, the remainder not directed upwards to such an extent. *Narada* is separable at once from either of the others by the size and different arrangement of these two main teeth, and by the constriction of the clasper about the middle.

(1) *HORSFIELDIA ANITA*, Hew.

This species is only poorly and somewhat doubtfully separable into local races, the differentiation of which is not very advanced.

(a) *H. anita naradoides*, Moore.

Confined to Ceylon. Although I have examined some forty examples of this race, I cannot find any definite character on which to separate it from Indian specimens. It is, however, *on the average* considerably larger and somewhat darker. The typical female has a large blue (or purple) patch on the fore wing, and occasionally a trace of blue about the bases of veins 3 and 4 on the hind wing above; the ♀-*f. darana*, Moore, has the blue area replaced by a brown of markedly lighter shade than the rest of the wing, and occasionally a little blue scaling centrally in area 1 *a* of fore wing above.

(b) *H. anita anita*, Hew.

Amblypodia narada dina, Frühst., *op. cit.*, p. 150.

Amblypodia arracana, Grose-Smith, A.M.N.H. (5), xx, p. 268.

Amblypodia narada, Swinhoe, Lep. Ind., viii, p. 136.

Extends from the Nilgiris to Khandala and across to Bengal, Darjeeling, Assam, Burma and Siam, and possibly to Malacca.

Hewitson's type is a small, bright purple specimen, with a moderate black border and a red underside; it came from Siam. One example in the British Museum from Darjeeling (Elwes Coll.) agrees remarkably well with the description of *arracana*. Burmese specimens are usually very pale above and below, and have only a very narrow black border on the upperside; they have an extremely "dry" appearance. Specimens from Madras and the Nilgiris have markedly pale cilia, the males rather pale above, pale reddish buff below, the females generally very light. From Kanara specimens are usually small, rather dark, the black border in the male comparatively broad; the females similar to *naradoides*, or the blue may be entirely absent or very much reduced.

Should these slight differences prove to be constant in their respective areas (which hardly seems probable), then *dina* should be restricted to the race from Madras and the Nilgiris, *arracana* be applied to the Darjeeling and Assam race, *anita* to the Siam and Malay Peninsula form, leaving the Kanara and Burmese races to be named.

(c) *H. anita orla*, Frühst.

The Javan race. Frühstorfer bases his description on four females. He confuses *anita* and *narada* throughout, and the description might apply to either; but since he separates it from typical *narada* (described from Java), the probability is that it refers to *anita*. A pair in the British Museum are characterised by their very dark and uniform undersides, the diagonal "mid-

rib" line being almost entirely obscured in the male, faintly present in the female.

(d) *H. anita andamanica*, ssp. nov.

Readily distinguished from *A. anita* in the male by the more bluish coloration of the upperside and the very dark underside; in the female by the larger bright blue area of the fore wing and the repetition of the same colour over a large area centrally on the hind wing. On the underside of the female there seem to be no distinguishing features.

B.M. Types No. Rh. 201 ♂, 202 ♀, Andamans (ex Hewitson Coll.).

Confined to the Andamans.

This race has been variously regarded as *erichsoni*, *narada* or *anita* by different authors. The genitalia of the male prove it to belong to *anita*.

(e) *H. anita hainana*, Crowley.

The largest and most brilliant race of *anita*, only known from the type specimen in the British Museum. The genitalia prove it to belong to *anita*.

(2) *HORSFIELDIA NARADA*, Horsf.

(a) *H. n. taoohana*, Moore.

The upperside in the male is very brilliant blue, and the black marginal band is about 2 mm. wide at the inner angle, 5 mm. in area 5. The underside varies from reddish to dark purplish brown.

Occurs in Burmah and Tennasserim, Malacca and E. Sumatra.

(b) *H. n. fara*, Frühst.

Frühstorfer describes this as "larger, with rounder wings than Javan examples, male of a more intense and brilliant blue than in *narada* [probably *narada narada* intended], female darker than *anita* from Pahang [? *narada taoohana* intended]. Underside darker than in examples from the mainland and Java, with two prominently displayed whitish-grey submarginal bands on the hind wing." He then goes on to say that it occurs in two seasonal forms, one "with a violet suffusion and yellow-brown underside from N.E. Sumatra, dry season"; the other almost "sage-blue," whatever colour that may be, and violet-brown underside. What I assume to be the latter is the only form I have seen. It comes from Nias, and also apparently from W. Sumatra.

(c) *H. n. narada*, Horsf.

This is the smallest and least brilliant race, and is confined to Java. The black border in the male is not nearly so narrowed posteriorly as in the preceding subspecies, and is more even. The female type has the blue scaling on the hind wing extending in the form of rays along veins 2, 3 and 4 right to the margin.

(d) *H. n. salvia*, Frühst.

Described from N. Borneo. Frühstorfer describes it as having a much narrower black distal border to the fore wing than the preceding. The reverse is the case in all the specimens I have examined, but the inner edge of this border is a great deal more diffuse than in the subspecies mentioned so far, and the underside is very dull and uniform, even the hind wing submarginal bands being hardly discernible. Only known from N. Borneo.

(e) *H. n. erichsoni*, Felder.

Very similar to *salvia*, Frühst., above, but far less uniform on the underside. Of the two distal grey bands on the hind wing below, the inner is by far the more conspicuous. Originally described from Luzon, and said by Frühstorfer to come also from Palawan and Bazilan; I have only seen it from Luzon.

(f) *H. n. plateni*, ssp. nov.

♂. Differs from all the preceding races in that the distal black border occupies the whole of the area from costa to upper edge of cell, the whole of the apical area, areas 4 and 5 with the exception of a few scattered scales proximally, more than half of area 3, rather less than half of area 2, and is 3 mm. wide at its narrowest point in area 1*b*. In effect the border appears to occupy practically the whole of the distal half of the wing. On the hind wing the blue does not extend into area 6 at all. Underside dark, greenish, markings as in *erichsonii*.

B.M. Type No. Rh. 203, ♂; Davao, S.E. Mindanao (*Dr. Platen*), ex Godman & Salvin Coll.

The female (B.M. Type No. Rh. 204) from the same source is very dark above with only a trace of blue distally in the cell on the hind wing, and a large blue patch on the fore wing occupying the bulk of areas 1*a*, 1*b* and the cell, but only extending into area 2 in the form of a few scattered scales. The underside is smooth dull ochreous, the markings very fine and delicate.

Apparently confined to Mindanao.

(To be continued.)